

36. The nucleic acid fragment of claim 35 wherein the promoter is a recombinant promoter.

37. A vector comprising a contiguous nucleic acid sequence of one of SEQ ID Nos: 1, 3, or 5.

38. The vector of claim 37 wherein the vector is an expression vector capable of expressing a peptide encoded by the nucleic acid sequence of one of SEQ ID 1, 3 or 5.

39. A host cell comprising the nucleic acid sequence of one of SEQ ID Nos: 1, 3, or 5.

40. A protein of approximately 17 kDa encoded by one of SEQ ID Nos 1, 3, or 5.

41. The approximately 17 kDa protein of claim 40 further comprised of the amino acid sequence of one of SEQ ID NO 2, 4 and 6.

42. The approximately 17 kDa protein of claim 40, encompassing amino acid substitutions, additions and deletions that do not alter one of the immunogenicity and the function of said protein.

43. A protein of approximately 17 kDa wherein said protein is immunoreactive with anti- *P. salmonis* serum.

44. The approximately 17 kDa protein of claim 43, encompassing amino acid substitutions, additions and deletions that do not alter one of the immunogenicity and the function of said protein.

45. The protein of claim 44 wherein the protein or variants thereof are fused to at least one other protein or protein fragment either at the N or C terminus or both.